



## **EMBEDDED REAL-TIME EXPERT SYSTEMS**

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**Specializing in novel practical solutions to hard technical problems, we have solved problems using artificial intelligence and custom pattern recognition for: DARPA, CIA, RADC, The RAND Corporation, Logicon, General Monitors and other government and commercial organizations. This has included bids and proposals, technical contract management, delivery of presentations and production of proposals as well as ingenious and effective technical work.**

### **Some Highlights:**

#### **Real-Time Pattern Recognition for Computer Vision**

Design and implementation of a novel real-time infrared image processing industrial flame sensor. Algorithm design, emulation and verification for ASIC implementation of a very fast low-cost image preprocessor (patent pending). Real-time pattern recognition designed and verified in C on a DSP (patent pending).

#### **Instantaneous Situation Assessment from Incomplete, Incomplete, Inconsistent, Incorrect and Disordered Data**

Design and implementation, as well as project management for automated intelligence analysis to supply a knowledge-based intelligence assessment whose reasoning could be examined and tweaked by a domain expert

#### **Novel Pattern Recognition Techniques**

Design and implementation of a highly effective neurophysiologically-based pattern recognition for continuous speech understanding.

#### **Background:**

Artificial Intelligence, Cognitive Psychology, Engineering, Pattern Recognition, Government R&D

Citizenship: US

Prior Clearance: TS/EBI

#### **Education:**

Special student, Artificial Intelligence and Cognitive Psychology, Carnegie-Mellon University, Pittsburgh, PA

PhD student, AI and Cognitive Psychology, University of Durham, UK

Diploma in Computer Science, University of Cambridge, UK

BSc Experimental Psychology, Sussex University, UK